IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently amended) A method of synchronizing states of data between a plurality of devices over a communication channel, the method comprising:

retrieving data from the devices;

updating centrally stored data, based on the data retrieved from the devices, so as to automatically recover from a prior synchronization failure, including

updating a truth database representing a true state of the data,

updating an action database indicating actions to be performed on the devices during a next update,

creating an effective action database which accounts for any of the devices which were offline during a previous synchronization, and

saving the truth database and the effective action database in an atomic transaction; and

updating the data states on the devices based on the updated centrally stored data, including communicating with at least one of the devices over the communication channel and using the effective action database to update the data on the device.

2. (Previously presented) A method as recited in claim 1, wherein the communication channel comprises a wireless network.

3. (Original) A method as recited in claim 2, wherein the wireless network is a wireless telecommunications network.

4. (Original) A method as recited in claim 1, wherein said updating centrally stored data comprises:

determining actual states of the data on the devices; and

updating centrally stored data indicating actions to be performed on the devices and states of the data on the devices.

5. (Original) A method as recited in claim 4, wherein said updating the data states on the devices comprises updating the data states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices.

6-7. (Canceled)

8. (Currently amended) A method of synchronizing states data between a plurality of devices, the method comprising:

retrieving data from the devices;

automatically recovering from a prior synchronization failure by updating centrally stored data, including

updating a truth database representing a true state of the data,

updating an action database indicating actions to be performed on the devices during a next update,

creating an effective action database which accounts for any of the devices which were offline during a previous synchronization, and

saving the truth database and the effective action database in an atomic transaction; and

updating the data states on the devices, including using the effective action database and communicating with at least one of the devices over a wireless network.

9. (Original) A method as recited in claim 8, wherein the wireless network is a wireless telecommunications network.

10. (Original) A method as recited in claim 8, wherein said automatically recovering from a synchronization failure comprises:

determining actual states of the data on the devices; and

maintaining centrally stored data indicating actions to be performed on the devices and the actual states of the data on the devices.

11. (Original) A method as recited in claim 10, wherein said updating the data states on the devices comprises updating the data states on the devices based on the centrally stored data.

12-13. (Canceled)

14. (Previously presented) A method of performing a synchronization process to synchronize states data between a plurality of devices, the method comprising:

retrieving data from the devices;

maintaining, in persistent storage, data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices;

using a recovery algorithm to determine actual states of the data on the devices;

updating the data indicating actions to be performed on the devices and the data

indicating the actual states of the data on the devices, based on results of the recovery algorithm; and

updating the data states on the devices, including communicating with at least one of the devices over a wireless network.

15. (Original) A method as recited in claim 14, wherein said updating the data states on the devices comprises updating the data states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices.

16. (Original) A method as recited in claim 14, wherein the wireless network is a wireless telecommunications network.

17. (Currently amended) A method of synchronizing states of data between a plurality of devices, the method comprising:

maintaining a truth database representing a true state of the data;

maintaining an action database indicating actions to be performed on the devices during a next update;

retrieving the data from the devices, including communicating with at least one of the devices over the wireless network;

determining actual current states of individual elements of the data based on the action database and the data retrieved from the devices;

updating the truth database and the action database based on a result of said determining; ~~and~~

creating an effective action database which accounts for any of the devices

which were offline during a previous synchronization;

saving the truth database and the effective action database in an atomic transaction; and

updating the data on the devices, including using the effective action database and communicating with at least one of the devices over a wireless telecommunications network.

18. (Original) A method as recited in claim 17, wherein said determining comprises determining actual current states of individual elements of the data so as to automatically recover from a synchronization failure.

19. (Original) A method as recited in claim 17, wherein the data comprises contact data representing a plurality of contacts.

20. (Canceled)

21. (Previously presented) A method of synchronizing states of contact data between a plurality of devices, the method comprising:

maintaining a truth database representing a true state of the contact data, the contact data representing a plurality of contacts;

maintaining an action table for each of the devices, the action table indicating actions to be performed on the corresponding device during a next update;

retrieving contact data from the devices, including communicating with at least one of the devices over a wireless telecommunications network;

determining actual current states of the contacts on the devices based on the

contact data retrieved from the devices and the action tables, so as to automatically recover from a synchronization failure;

updating the truth database and the action tables based on a result of said determining;

creating an effective action table for at least one of the devices based on the updated action table for the device and a previous version of the action table for the device, to account for any of the devices which were offline during a most-recent synchronization;

saving the truth database and the effective action table in an atomic transaction; and

using the effective action table to update the states of the contact data on the devices, including communicating with at least one of the devices over the wireless telecommunications network.

22. (Previously presented) An apparatus for synchronizing states of data between a plurality of devices over a communication channel, the method comprising:

means for retrieving data from the devices;

means for automatically recovering from a prior synchronization failure; and

means for updating the data states on the devices based on the centrally stored data, including communicating with at least one of the devices over the communication channel.

23. (Previously presented) An apparatus as recited in claim 22, wherein the communication channel comprises a wireless network.

24. (Original) An apparatus as recited in claim 23, wherein the wireless network is a wireless telecommunications network.

25. (Previously presented) An apparatus as recited in claim 22, wherein said means for communicating with at least one of the devices over the communication channel comprises means for communicating with said at least one of the devices over a wireless communications network.

26. (Original) An apparatus as recited in claim 22, wherein said means for automatically recovering from a synchronization failure comprises:

means for determining actual states of the data on the devices; and

means for updating centrally stored data indicating actions to be performed on the devices and states of the data on the devices.

27. (Original) An apparatus as recited in claim 26, wherein said means for updating the data states on the devices comprises means for updating the data states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices.

28. (Original) An apparatus as recited in claim 27, wherein said means for automatically recovering from a prior synchronization failure by updating centrally stored data comprises:

means for updating a truth database representing a true state of the data; and

means for updating an action database indicating actions to be performed on the devices during a next update.

29. (Original) An apparatus as recited in claim 28, wherein said means for automatically recovering from a prior synchronization failure comprises:

means for creating an effective action database which accounts for any of the devices which were offline during a previous synchronization; and

means for saving the truth database and the effective action database in an atomic transaction;

wherein said means for updating the data on the devices comprises means for using the effective action database to update the data on the devices.

30. (Original) An apparatus to synchronize data states between a plurality of devices, the apparatus comprising:

a database system to store

a truth database representing a true state of the data, and

an action database indicating actions to be performed on the devices during a next update;

a recovery unit to determine actual current states of the data based on the action database and data retrieved from the devices; and

a synchronization engine to update the truth database and the action database, based on output of the recovery module, and to update data states on the devices based on the action database, by communicating with at least one of the devices over the wireless network.

31. (Original) An apparatus as recited in claim 30, wherein the wireless network is a wireless telecommunications network.

32. (Original) An apparatus as recited in claim 30, wherein the synchronization engine further is to update the truth database and the action database, based on output of the recovery module, so as to automatically recover from a failure of a prior synchronization.

33. (Currently amended) A machine-readable program storage medium storing instructions which, when executed in a processing system, cause the processing system to perform a method of synchronizing states of data between a plurality of devices, at least one of which is a mobile device operating on a wireless telecommunications network, the method comprising:

maintaining a truth database representing a true state of the data;

maintaining an action database indicating actions to be performed on the devices during a next update;

retrieving the data from the devices, including communicating with at least one of the devices over the wireless telecommunications network;

determining actual current states of individual elements of the data based on the action database and the data retrieved from the devices;

updating the truth database and the action database based on a result of said determining; ~~and~~

creating an effective action database which accounts for any of the devices which were offline during a previous synchronization;

saving the truth database and the effective action database in an atomic transaction; and

updating the data on the devices, including using the effective action database

and communicating with at least one of the devices over the wireless telecommunications network.

34. (Original) A machine-readable program storage medium as recited in claim 33, wherein said determining comprises determining actual current states of individual elements of the data so as to automatically recover from a synchronization failure.

35. (Original) A machine-readable program storage medium as recited in claim 33, wherein the data comprises contact data representing a plurality of contacts.

36. (Canceled).

37. (Original) A processing system comprising:

a processor;

a data communication device coupled to the processor to communicate data with a plurality of remote devices, at least one of which operates on a wireless telecommunications network; and

a storage facility coupled to the processor and storing instructions for execution by the processor to cause the processing system to perform a method comprising:

maintaining a truth database representing a true state of data maintained by the devices;

maintaining an action database indicating actions to be performed on the devices during a next update;

retrieving the data from the devices, including communicating with at least one of the devices over the wireless telecommunications network;

determining actual current states of individual elements of the data based on the action database and the data retrieved from the devices;

updating the truth database and the action database based on a result of determining the actual current states of individual elements of the data;

creating an effective action database which accounts for any of the devices which were offline during a previous synchronization;

saving the truth database and the effective action database in an atomic transaction; and

using the effective action database to update the data on the devices, including communicating with at least one of the devices over the wireless telecommunications network.

38. (Original) A processing system as recited in claim 37, wherein the data comprises contact data representing a plurality of contacts.

39. (Original) A processing system as recited in claim 37, wherein said creating an effective action database comprises creating the effective action database based on the updated action table and a previous version of the action database to account for any of the devices which were offline during a most-recent synchronization.